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VOLPE AND KOENIG, P.C.
UNITED PLAZA, SUITE 1600
30 SOUTH 17TH STREET
PHILADELPHIA, PA 19103

EXAMINER	
BLACKMAN, ROCHELLE ANN J	

ART UNIT	PAPER NUMBER
2851	

DATE MAILED: 12/06/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Supplemental Notice of Allowability	Application No. 10/689,260	Applicant(s) IMADE, SHINICHI	
	Examiner Rochelle Blackman	Art Unit 2851	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to *amendment filed 06 September 2005*.

2. ☒ The allowed claim(s) is/are *1-65 and 72-79*.

3. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
   a) ☒ All b) ☐ Some* c) ☐ None of the:
      1. ☒ Certified copies of the priority documents have been received.
      2. ☐ Certified copies of the priority documents have been received in Application No. _____ .
      3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

   * Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.

5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
   (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
      1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
   (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.

   Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).

6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413), Paper No./Mail Date _____.
7. ☒ Examiner's Amendment/Comment
8. ☐ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____.

Election/Restrictions

1. Claims 1, 29, 57, 63-65, and 72-79 are generic and allowable. Accordingly, the restriction requirement as to the encompassed species is hereby withdrawn and claims 6-28, 34-56, 58, 59, 61, and 62, directed to a non-elected species is no longer withdrawn from consideration since all of the claims to this species depend from or otherwise include each of the limitations of an allowed generic claim. However, claims 66-71, directed to a non-elected species remain withdrawn from consideration since they do not depend upon or otherwise include all the limitations of an allowed generic claim as required by 37 CFR 1.141.

In view of the above noted withdrawal of the restriction requirement as to the linked species, applicant(s) are advised that if any claim(s) depending from or including all the limitations of the allowable generic linking claim(s) be presented in a continuation or divisional application, such claims may be subject to provisional statutory and/or nonstatutory double patenting rejections over the claims of the instant application. Once a restriction requirement is withdrawn, the provisions of 35 U.S.C. 121 are no longer applicable. See *In re Ziegler*, 44 F.2d 1211, 1215, 170 USPQ 129, 131-32 (CCPA 1971). See also MPEP § 804.01.

2. This application is in condition for allowance except for the presence of claims 66-71 to a species non-elected without traverse. Accordingly, claims 66-71 have been cancelled.

EXAMINER'S AMENDMENT

An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

The application has been amended as follows: Please amend the claims as follows:

1. (Currently amended) An illumination apparatus illuminating [[an]] a specific objective illumination region, comprising:

a plurality of illuminants having light-emitting surfaces radiating diffused light; an illuminant substrate in which the illuminants are disposed so as to be set in array on a circumference;

at least one optical member configured to guide the diffused light to the objective illumination region;

a movable section configured to drive the optical member so as to be rotatable around a center of the circumference serving as a rotation center; and

a lighting control section configured to control a periodic successive light-emitting timing of the plurality of illuminants, wherein

the at least one optical member is adapted to guide the light from the illuminants in a common direction in order to illuminate the specific objective illumination region, and

the movable section and the lighting control section operate together such that a quantity of light per unit time of the diffused light guided to the specific objective illumination region is within a predetermined range.

2. (Original) The apparatus according to claim 1, wherein the lighting control section lights the illuminants whose light-emitting surfaces are positioned at an area on the illuminant substrate which is guided by the optical member.

3. (Original) The apparatus according to claim 2, wherein a number of the illuminants which are lit is always the same number.

4. (Currently amended) The apparatus according to claim 1, wherein the number of the illuminants disposed on the illuminant substrate is an odd number,

two optical members are provided and are made to be one set, wherein at least one set is provided, and

the optical members of the set guides the diffused light radiated at a position on the circumference which is point symmetrical with respect to the rotation center, to the specific objective illumination region.

5. (Currently amended) The apparatus according to claim 1, wherein the number of the illuminants disposed on the illuminant substrate is an even number,

two optical members are provided and are made to be one set, wherein at least one set is provided, and

the optical members of set guides the diffused light radiated from the illuminant positioned at a position which is point symmetrical with respect to the rotation center, to the specific objective illumination region.

6. (Original) The apparatus according to claim 1, further comprising:

a radiating section configured to radiate heat generated by the plurality of illuminants; and

a radiating exhaust member configured to exhaust air contacting with the radiating section, wherein

a driving force source moving the radiating exhaust member and the movable section are the same motor.

7. (Original) The apparatus according to claim 6, wherein the radiating exhaust member includes a centrifugal fan generating the flow of air by rotation of the motor.

8. (Original) The apparatus according to claim 7, wherein the centrifugal fan includes a scirocco fan.

9. (Original) The apparatus according to claim 1, wherein antireflection processing is applied to a surface on which the diffused light which is not incident to the optical member is illuminated.

10. (Original) The apparatus according to claim 1, wherein light shield processing is applied to prevent the diffused light which is not incident to the optical member from leaking out of the apparatus.

11. (Original) The apparatus according to claim 1, wherein light guiding members configured to guide the diffused light radiated by the illuminant to the optical member are disposed for the respective illuminants.

12. (Original) The apparatus according to claim 11, wherein outgoing end surfaces of the light guiding members radiating light with respect to the optical member are disposed without space on a circumference whose diameter is smaller than that of the circumference.

13. (Original) The apparatus according to claim 12, wherein the light guiding members include tapered rods.

14. (Original) The apparatus according to claim 11, wherein

the incident surface of the optical member is smaller than the light-emitting surfaces of the respective illuminants,

the light guiding member includes:

a NA conversion section configured to make an NA to which the outgoing light from the light-emitting surface is incident small; and

an inverted tapered rod to which the ray whose NA is made small by the NA conversion section is incident, and

the inverted tapered rod is a rod in which a size of the outgoing surface thereof is the substantially same size as the incident surface of the optical member, and the outgoing surface thereof is smaller than the incident surface.

15. (Original) The apparatus according to claim 14, wherein the NA conversion section includes a tapered rod.

16. (Original) The apparatus according to claim 14, wherein the NA conversion section includes a microprism array.

17. (Original) The apparatus according to claim 14, wherein

the NA conversion section includes a plurality light guiding prisms disposed in the vicinity of the illuminant in the positional relationship so as to be point symmetrical with respect to the center of the illuminant, and

the light guiding prism includes:

an incident surface configured to make the outgoing light from the illuminant be incident;

a reflecting surface configured to reflect the light incident from the incident surface and guiding the light in the prism to a predetermined direction; and

an outgoing surface configured to radiate the light guided at the reflecting surface.

18. (Original) The apparatus according to claim 17, wherein the reflecting surface has a surface shape satisfying the conditions that the light incident from the incident surface is reflected.

19. (Original) The apparatus according to claim 17, wherein reflection coating reflecting the light incident from the incident surface is applied on the reflecting surface.

20. (Original) The apparatus according to claim 17, wherein reflection coating is applied on surfaces which face the other light guiding prisms and which are other than the incident surface, the reflecting surface, and outgoing surface, among the surfaces structuring the light guiding prism.

21. (Original) The apparatus according to claim 17, wherein a rear surface of the reflecting surface structuring the light guiding prism has a surface shape satisfying conditions that the outgoing light from the illuminant which is not incident to the incident surface which is a surface structuring the light guiding prism is reflected.

22. (Original) The apparatus according to claim 17, wherein reflection coating reflecting the outgoing light from the illuminant which is not incident to the incident

surface which is a surface structuring the light guiding prism is applied on the rear surface of the reflecting surface structuring the light guiding prism.

23. (Original) The apparatus according to claim 1, further comprising:

a light quantity monitor configured to detect the quantity of the light radiated from the optical member, wherein

the movable section and the lighting control section operate together such that the quantity of light detected by the light quantity monitor is substantially constant.

24. (Original) The apparatus according to claim 23, further comprising:

a microreflecting prism configured to reflect the light radiated from the optical member; and

a light guiding plate configured to guide the light reflected by the microreflecting prism, to the light quantity monitor.

25. (Original) The apparatus according to claim 1, wherein

the plurality of illuminants are disposed so as to be set in array on double circumferences, and

the at least one optical member is disposed so as to correspond to the respective double circumferences.

26. (Original) The apparatus according to claim 1, wherein the optical member includes a tapered rod in which an area of the outgoing end surface thereof is larger than an area of the incident end surface thereof.

27. (Original) The apparatus according to claim 1, further comprising:

a second optical member to which the light radiated from the outgoing end surfaces of the plurality of optical member are incident, wherein

the second optical member includes a tapered rod, the tapered rod being fixed to the illuminant substrate and having an outgoing end surface shape which is the substantially same shape as a shape of the objective illumination region.

28. (Original) The apparatus according to claim 1, wherein the outgoing end surface of the optical member is one of a polygon and a circular in which the rotation center of the movable section serves as the center thereof.

29. (Currently amended) An illumination apparatus illuminating [[an]] a specific objective illumination region, comprising:

a plurality of illuminants having light-emitting surfaces radiating diffused light; an illuminant substrate in which the illuminants are disposed so as to be set in array on a circumference;

at least one optical member configured to guide the diffused light to the objective illumination region;

a movable section configured to drive the optical member so as to be rotatable around a center of the circumference serving as a rotation center; and

a lighting control section configured to control a periodic successive light-emitting timing of the plurality of illuminants, wherein

the at least one optical member is adapted to guide the light from the illuminants in a common direction in order to illuminate the specific objective illumination region, and

the movable section and the lighting control section operate together such that an area of the light-emitting surface emitting the diffused light for the light guided to the specific objective illumination region is within a predetermined range in variations in time.

30. (Original) The apparatus according to claim 29, wherein the lighting control section lights the illuminants whose light-emitting surfaces are positioned at an area on the illuminant substrate which is guided by the optical member.

31. (Original) The apparatus according to claim 30, wherein a number of the illuminants which are lit is always the same number.

32. (Currently amended) The apparatus according to claim 29, wherein

the number of the illuminants disposed on the illuminant substrate is an odd number,

two optical members are provided and are made to be one set, wherein at least one set is provided, and

the optical members set guides the diffused light radiated at a position on the circumference which is point symmetrical with respect to the rotation center, to the specific objective illumination region.

33. (Currently amended) The apparatus according to claim 29, wherein

the number of the illuminants disposed on the illuminant substrate is an even number,

two optical members are provided and are made to be one set, wherein at least one set is provided, and

the optical members sets guides the diffused light radiated from the illuminant positioned at a position which is point symmetrical with respect to the rotation center, to the specific objective illumination region.

34. (Original) The apparatus according to claim 29, further comprising:

a radiating section configured to radiate heat generated by the plurality of illuminants; and

a radiating exhaust member configured to exhaust air contacting with the radiating section, wherein

a driving force source moving the radiating exhaust member and the movable section are the same motor.

35. (Original) The apparatus according to claim 34, wherein the radiating exhaust member includes a centrifugal fan generating the flow of air by rotation of the motor.

36. (Original) The apparatus according to claim 35, wherein the centrifugal fan includes a scirocco fan.

37. (Original) The apparatus according to claim 29, wherein antireflection processing is applied to a surface on which the diffused light which is not incident to the optical member is illuminated.

38. (Original) The apparatus according to claim 29, wherein light shield processing is applied to prevent the diffused light which is not incident to the optical member from leaking out of the apparatus.

39. (Original) The apparatus according to claim 29, wherein light guiding members configured to guide the diffused light radiated by the illuminant to the optical member are disposed for the respective illuminants.

40. (Original) The apparatus according to claim 39, wherein outgoing end surfaces of the light guiding members radiating light with respect to the optical member are disposed without space on a circumference whose diameter is smaller than that of the circumference.

41. (Original) The apparatus according to claim 40, wherein the light guiding members include tapered rods.

42. (Original) The apparatus according to claim 39, wherein

the incident surface of the optical member is smaller than the light-emitting surfaces of the respective illuminants,

the light guiding member includes:

a NA conversion section configured to make an NA to which the outgoing light from the light-emitting surface is incident small;

and an inverted tapered rod to which the ray whose NA is made small by the NA conversion section is incident, and

the inverted tapered rod is a rod in which a size of the outgoing surface thereof is the substantially same size as the incident surface of the optical member, and the outgoing surface thereof is smaller than the incident surface.

43. (Original) The apparatus according to claim 42, wherein the NA conversion section includes a tapered rod.

44. (Original) The apparatus according to claim 42, wherein the NA conversion section includes a microprism array.

45. (Original) The apparatus according to claim 42, wherein

the NA conversion section includes a plurality light guiding prisms disposed in the vicinity of the illuminant in the positional relationship so as to be point symmetrical with respect to the center of the illuminant, and

the light guiding prism includes:

an incident surface configured to make the outgoing light from the illuminant be incident;

a reflecting surface configured to reflect the light incident from the incident surface and guiding the light in the prism to a predetermined direction; and

an outgoing surface configured to radiate the light guided at the reflecting surface.

46. (Original) The apparatus according to claim 45, wherein the reflecting surface has a surface shape satisfying the conditions that the light incident from the incident surface is reflected.

47. (Original) The apparatus according to claim 45, wherein reflection coating reflecting the light incident from the incident surface is applied on the reflecting surface.

48. (Original) The apparatus according to claim 45, wherein reflection coating is applied on surfaces which face the other light guiding prisms and which are other than the incident surface, the reflecting surface, and outgoing surface, among the surfaces structuring the light guiding prism.

49. (Original) The apparatus according to claim 45, wherein a rear surface of the reflecting surface structuring the light guiding prism has a surface shape satisfying conditions that the outgoing light from the illuminant which is not incident to the incident surface which is a surface structuring the light guiding prism is reflected.

50. (Original) The apparatus according to claim 45, wherein reflection coating reflecting the outgoing light from the illuminant which is not incident to the incident surface which is a surface structuring the light guiding prism is applied on the rear surface of the reflecting surface structuring the light guiding prism.

51. (Original) The apparatus according to claim 29, further comprising: a light quantity monitor configured to detect the quantity of the light radiated from the optical member, wherein the movable section and the lighting control section operate together such that the quantity of light detected by the light quantity monitor is substantially constant.

52. (Original) The apparatus according to claim 51, further comprising:

a microreflecting prism configured to reflect the light radiated from the optical member; and

a light guiding plate configured to guide the light reflected by the microreflecting prism, to the light quantity monitor.

53. (Original) The apparatus according to claim 29, wherein the plurality of illuminants are disposed so as to be set in array on double circumferences, and the at

least one optical member is disposed so as to correspond to the respective double circumferences.

54. (Original) The apparatus according to claim 29, wherein the optical member includes a tapered rod in which an area of the outgoing end surface thereof is larger than an area of the incident end surface thereof.

55. (Original) The apparatus according to claim 29, further comprising:

a second optical member to which the light radiated from the outgoing end surfaces of the plurality of optical member are incident, wherein

the second optical member includes a tapered rod, the tapered rod being fixed to the illuminant substrate and having an outgoing end surface shape which is the substantially same shape as a shape of the objective illumination region.

56. (Original) The apparatus according to claim 29, wherein the outgoing end surface of the optical member is one of a polygon and a circular in which the rotation center of the movable section serves as the center thereof.

57. (Previously presented) An illumination apparatus illuminating an objective illumination region, comprising:

a plurality of illuminants having light-emitting surfaces radiating diffused light;

an illuminant substrate in which the illuminants are disposed so as to be set in array on a circumference;

a plurality of optical members which each have incident end surfaces and outgoing end surfaces, and which are configured to radiate the diffused light incident from the incident end surfaces and guide the diffused light to the objective illumination region;

a movable section configured to drive the plurality of optical members so as to be rotatable around a center of the circumference serving as a rotation center;

and a lighting control section configured to control a light-emitting timing of the plurality of illuminants, wherein

the respective outgoing end surfaces of the plurality of optical members are in rotation symmetrical relationship with respect to the center of the circumference.

58. (Original) The apparatus according to claim 57, wherein the outgoing end surface of the optical member has a rectangular shape in which the sides facing the center of the circumference are the long sides.

59. (Original) The apparatus according to claim 57, wherein

the incident end surface of the optical member is a rectangular shape having the long sides in a direction of arranging of the illuminants which are set in array on the illuminant substrate, and

the outgoing end surface of the optical member has a rectangular shape in which the lengths of the respective sides of the corresponding incident end surface are made longer.

60. (Previously presented) The apparatus according to claim 57, wherein the plurality of optical members includes a tapered rod in which an area of the outgoing end surface thereof is larger than an area of the incident end surface thereof.

61. (Original) The apparatus according to claim 57, further comprising: a second optical member to which the light radiated from the outgoing end surfaces of the plurality of optical member are incident, wherein the second optical member includes a tapered rod, the tapered rod being fixed to the illuminant substrate and having an outgoing end surface shape which is the substantially same shape as a shape of the objective illumination region.

62. (Original) The apparatus according to claim 57, wherein the outgoing end surface of the optical member is one of a polygon and a circular in which the rotation center of the movable section serves as the center thereof.

63. (Currently Amended) An image projection apparatus comprising:

an illumination apparatus configured to illuminate [[an]] a specific objective illumination region, the illumination apparatus including:

a plurality of illuminants having light-emitting surfaces radiating diffused light;

an illuminant substrate in which the illuminants are disposed so as to be set in array on a circumference;

at least one optical member configured to guide the diffused light to the objective illumination region;

a movable section configured to drive the optical member so as to be rotatable around a center of the circumference serving as a rotation center; and

a lighting control section configured to control a periodic successive light-emitting timing of the plurality of illuminants, wherein

the at least one optical member is adapted to guide the light from the illuminants in a common direction in order to illuminate the specific objective illumination region, and

the movable section and the lighting control section operate together such that the quantity of light per unit time of the diffused light guided to the specific objective illumination region is within a predetermined range;

a display device disposed at an objective irradiation region of the illumination apparatus; and

a projection lens configured to project an image formed at the display device on a screen.

64. (Currently amended) An image projection apparatus comprising:

an illumination apparatus configured to illuminate [[an]] a specific objective illumination region, the illumination apparatus including:

a plurality of illuminants having light-emitting surfaces radiating diffused light;

an illuminant substrate in which the illuminants are disposed so as to be set in array on a circumference;

at least one optical member configured to guide the diffused light to the specific objective illumination region;

a movable section configured to drive the at least one optical member so as to be rotatable around a center of the circumference serving as a rotation center; and

a lighting control section configured to control a light-emitting timing of the plurality of illuminants, wherein

the at least one optical member is adapted to guide the light from the illuminants in a common direction in order t illuminate the specific objective illumination region, and

the movable section and the lighting control section operate together such that an area of the light-emitting surface emitting the diffused light for the light guided to the illumination region is within a predetermined range in variations in time;

a display device disposed at an objective irradiation region of the illumination apparatus; and

a projection lens configured to project an image formed at the display device on a screen.

65. (Previously presented) An image projection apparatus comprising:

an illumination apparatus configured to illuminate an objective illumination region, the illumination apparatus including:

a plurality of illuminants having light-emitting surfaces radiating diffused light;

an illuminant substrate in which the illuminants are disposed so as to be set in array on a circumference;

a plurality of optical members which each have incident end surfaces and outgoing end surfaces, and which are configured to radiate the diffused light incident from the incident end surfaces and guide the diffused light to the objective illumination region;

a movable section configured to drive the plurality of optical members so as to be rotatable around a center of the circumference serving as a rotation center; and

a lighting control section configured to control a light-emitting timing of the plurality of illuminants, wherein

the respective outgoing end surfaces of the plurality of optical members are in rotation symmetrical relationship with respect to the center of the circumference;

a display device disposed at an objective irradiation region of the illumination apparatus; and

a projection lens configured to project an image formed at the display device on a screen.

66-71. (Cancelled)

72. (Currently amended) An illumination apparatus illuminating [[an]] a specific objective illumination region, comprising:

a plurality of illuminants having light-emitting surfaces radiating diffused light;

an illuminant substrate in which the illuminants are disposed so as to be set in array on a circumference;

at least one optical means for guiding the diffused light to the specific objective illumination region;

movable means for driving the optical means so as to be rotatable around a center of the circumference serving as a rotation center; and

lighting control means for controlling a periodic successive light-emitting timing of the plurality of illuminants, wherein

the optical means are adapted to guide the lights from the illuminants in a common direction in order to illuminate the specific objective illumination region, and

the movable means and the lighting control means operate together such that a quantity of light per unit time of the diffused light guided to the objective illumination region is within a predetermined range.

73. (Currently amended) An illumination apparatus illuminating [[an]] a specific objective illumination region, comprising:

a plurality of illuminants having light-emitting surfaces radiating diffused light;

an illuminant substrate in which the illuminants are disposed so as to be set in array on a circumference;

at least one optical means for guiding the diffused light to the specific objective illumination region;

movable means for driving the at least optical means so as to be rotatable around a center of the circumference serving as a rotation center; and

lighting control means for controlling a light-emitting timing of the plurality of illuminants, wherein

the optical means are adapted to guide the lights from the illuminants in a common direction in order to illuminate the specific objective illumination region, and

the movable means and the lighting control means operate together such that an area of the light-emitting surface emitting the diffused light for the light guided to the illumination region is within a predetermined range in variations in time.

74. (Previously presented) An illumination apparatus illuminating an objective illumination region, comprising:

a plurality of illuminants having light-emitting surfaces radiating diffused light;

an illuminant substrate in which the illuminants are disposed so as to be set in array on a circumference;

a plurality of optical means which each have incident end surfaces and outgoing end surfaces for radiating the diffused light incident from the incident end surfaces and guiding the diffused light to the objective illumination region;

movable means for driving the plurality of optical means so as to be rotatable around a center of the circumference serving as a rotation center; and

lighting control means for controlling a light-emitting timing of the plurality of illuminants, wherein

the respective outgoing end surfaces of the plurality of optical means are in rotation symmetrical relationship with respect to the center of the circumference.

75. (Currently amended) An image projection apparatus comprising:

an illumination apparatus for illuminating [[an]] a specific objective illumination region, the illumination apparatus including:

a plurality of illuminants having light-emitting surfaces radiating diffused light;

an illuminant substrate in which the illuminants are disposed so as to be set in array on a circumference;

at least one optical means for guiding the diffused light to the specific objective illumination region;

movable means for driving the optical means so as to be rotatable around a center of the circumference serving as a rotation center; and

lighting control means for controlling a periodic successive light-emitting timing of the plurality of illuminants, wherein

the optical means are adapted to guide the lights from the illuminants in a common direction in order to illuminate the specific objective illumination region, and

the movable means and the lighting control means operate together such that a quantity of light per unit time of the diffused light guided to the specific objective illumination region is within a predetermined range;

a display device disposed at an objective irradiation region of the illumination apparatus; and

a projection lens for projecting an image formed at the display device on a screen.

76. (Currently amended) An image projection apparatus comprising:

an illumination apparatus for illuminating [[an]] a specific objective illumination region, the illumination apparatus including:

a plurality of illuminants having light-emitting surfaces radiating diffused light;

an illuminant substrate in which the illuminants are disposed so as to be set in array on a circumference;

at least one optical means for guiding the diffused light to the specific objective illumination region;

movable means for driving at least one optical means so as to be rotatable around a center of the circumference serving as a rotation center; and

lighting control means for controlling a periodic successive light-emitting timing of the plurality of illuminants, wherein

the optical means are adapted to guide the lights from the illuminants in a common direction in order to illuminate the specific objective illumination region, and

the movable means and the lighting control means operate together such that an area of the light-emitting surface emitting the diffused light for the light guided to the illumination region is within a predetermined range in variations in time;

a display device disposed at an objective irradiation region of the illumination apparatus; and

a projection lens for projecting an image formed at the display device on a screen.

77. (Previously Presented) An image projection apparatus comprising:

an illumination apparatus for illuminating an objective illumination region, the illumination apparatus including:

a plurality of illuminants having light-emitting surfaces radiating diffused light;

an illuminant substrate in which the illuminants are disposed so as to be set in array on a circumference;

a plurality of optical means which each have incident end surfaces and outgoing end surfaces for radiating the diffused light incident from the incident end surfaces and guiding the diffused light to the objective illumination region;

movable means for driving the plurality of optical means so as to be rotatable around a center of the circumference serving as a rotation center; and

lighting control means for controlling a light-emitting timing of the plurality of illuminants, wherein

the respective outgoing end surfaces of the plurality of optical means are in rotation symmetrical relationship with respect to the center of the circumference;

a display device disposed at an objective irradiation region of the illumination apparatus; and

a projection lens for projecting an image formed at the display device on a screen.

78. (Previously presented) The apparatus according to claim 1, wherein the optical member comprises an optical rod.

79. (Previously presented) The apparatus according to claim 29, wherein the optical member comprises an optical rod.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Rochelle Blackman whose telephone number is (571) 272-2113. The examiner can normally be reached on M-F 8:00-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Judy Nguyen can be reached on (571) 272-2258. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

RB

William Perkey
Primary Examiner